ELSEVIER

Comput. Methods Appl. Mech. Engrg. 158 (1998) 409–410

Computer methods in applied mechanics and engineering

Author Index of Volume 158

Ahmed, M.N. see Yilbas, B.S. 143–154
Alvarez-Vázquez, L.J., Rodríguez-Rodríguez, A.R. and Viaño, J.M. Genuinely clamped beams 375–388
Armero, F. and Petőcz, E. Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems 269–300

Bloor, M.I.G. see Brown, J.M. 221–234
Bloor, M.S. see Brown, J.M. 221–234
Brown, J.M., Bloor, M.I.G., Bloor, M.S. and Wilson, M.J. The accuracy of B-spline finite element approximations to PDE surfaces 221–234
Budair, M.O. see Yilbas, B.S. 143–154
Burnett, D.S. and Holford, R.L. Prolate and oblate spheroidal acoustic infinite elements 117–142

Chew, Y.T. see Guo, T. 357–366

De Donno, M. see Litvin, F.L. 23– 34

Egelja, A.M. see Litvin, F.L. 23– 34

Fröhlich, J. and Lang, J. Two-dimensional cascadic finite element computations of combustion problems 255–267

Ghanem, R. Probabilistic characterization of transport in heterogeneous media 199–220
Guo, T., Chew, Y.T., Luo, S.C. and Su, M.D. A new numerical simulation method of high Reynolds number flow around a cylinder 357–366
Guoqing, W. see Haojiang, D. 65– 80

Halanay, A. and Safta, C.A. Periodic motions for loaded two control edges hydraulic copying systems 367–374
Handschuh, R.F. see Litvin, F.L. 35– 64
Hansbo, P. A new approach to quadrature for finite elements incorporating hourglass control as a special case 301–309
Haojiang, D., Guoqing, W. and Weiqiu, C. A boundary integral formulation and 2D fundamental solutions for piezoelectric media 65– 80
Heppler, G.R. see Vermeulen, A.H. 311–327
Holford, R.L. see Burnett, D.S. 117–142
Hughes, T.J.R. see Stewart, J.R. 1– 22
Hughes, T.J.R. see Taylor, C.A. 155–196

Kershaw, D.S., Prasad, M.K., Shaw, M.J. and Milovich, J.L. 3D Unstructured mesh ALE hydrodynamics with the upwind discontinuous finite element method 81–116

Lang, J. see Fröhlich, J. 255–267
Liem, C.-b. see Zhou, A. 329–339
Litvin, F.L., Egelja, A.M. and De Donno, M. Computerized determination of singularities and envelopes to families of contact lines on gear tooth surfaces 23– 34
Litvin, F.L., Wang, A.G. and Handschuh, R.F. Computerized generation and simulation of meshing and contact of spiral bevel gears with improved geometry 35– 64
Lü, L. see Zhou, A. 329–339
Luo, S.C. see Guo, T. 357–366

Meek, J.L. and Xue, Q. A study on the instability problem for 3D frames 235–254
Milovich, J.L. see Kershaw, D.S. 81–116

Paraschivoiu, M. and Patera, A.T. A hierarchical duality approach to bounds for the outputs of partial differential equations 389–407
Patera, A.T. see Paraschivoiu, M. 389–407
Petőcz, E. see Armero, F. 269–300
Petzold, L. see Yen, J. 341–355
Prasad, M.K. see Kershaw, D.S. 81–116

Raha, S. see Yen, J. 341–355
Rodríguez-Rodríguez, A.R. see Alvarez-Vázquez, L.J. 375–388

Safta, C.A. see Halanay, A. 367–374
Shaw, M.J. see Kershaw, D.S. 81–116
Shih, T.-m. see Zhou, A. 329–339
Stewart, J.R. and Hughes, T.J.R. A tutorial in elementary finite element error analysis: A systematic presentation of a priori and a posteriori error estimates 1– 22
Su, M.D. see Guo, T. 357–366

Taylor, C.A., Hughes, T.J.R. and Zarins, C.K. Finite element modeling of blood flow in arteries 155–196

Vermeulen, A.H. and Heppler, G.R. Predicting and avoiding shear locking in beam vibration problems using the B-spline field approximation method 311–327
Viaño, J.M. see Alvarez-Vázquez, L.J. 375–388

Wang, A.G. see Litvin, F.L. 35– 64
Weiqiu, C. see Haojiang, D. 65– 80
Wilson, M.J. see Brown, J.M. 221–234

Xue, Q. see Meek, J.L. 235–254

Yen, J., Petzold, L. and Raha, S. A time integration algorithm for flexible mechanism dynamics: The DAE α-method 341–355
Yilbas, B.S., Budair, M.O. and Ahmed, M.N. Numerical simulation of the flow field around a cascade of NACA 0012 airfoils-effects of solidity and stagger 143–154

Zarins, C.K. see Taylor, C.A. 155–196
Zhou, A., Liem, C.-b., Shih, T.-m. and Lü, L. Error analysis on bi-parameter finite elements 329–339

ELSEVIER

Comput. Methods Appl. Mech. Engrg. 158 (1998) 411–414

Computer methods in applied mechanics and engineering

Subject Index of Volume 158

Acoustics
Prolate and oblate spheroidal acoustic infinite elements, D.S. Burnett and R.L. Holford 117–141

Boundary element methods
A boundary integral formulation and 2D fundamental solutions for piezoelectric media, D. Haojiang, W. Guoqing and C. Weiqiu 65– 80

Conformal mapping
A new numerical simulation method of high Reynolds number flow around a cylinder, T. Guo, Y.T. Chew, S.C. Luo and M.D. Su 357–366

Control theory
Periodic motions for loaded two control edges hydraulic copying systems, A. Halanay and C.A. Safta 367–374

Dynamics
Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems, F. Armero and E. Petőcz 269–300
Predicting and avoiding shear locking in beam vibration problems using the B-spline field approximation method, A.H. Vermeulen and G.R. Heppler 311–327
A time integration algorithm for flexible mechanism dynamics: The DAE α-method, J. Yen, L. Petzold and S. Raha 341–355

Elasticity
A boundary integral formulation and 2D fundamental solutions for piezoelectric media, D. Haojiang, W. Guoqing and C. Weiqiu 65– 80
Genuinely clamped beams, L.J. Alvarez-Vázquez, A.R. Rodríguez-Rodríguez and J.M. Viaño 375–388

Electromechanics
Prolate and oblate spheroidal acoustic infinite elements, D.S. Burnett and R.L. Holford 117–141

Finite difference methods
3D Unstructured mesh ALE hydrodynamics with the upwind discontinuous finite element method, D.S. Kershaw, M.K. Prasad, M.J. Shaw and J.L. Milovich 81–116
A time integration algorithm for flexible mechanism dynamics: The DAE α-method, J. Yen, L. Petzold and S. Raha 341–355
A new numerical simulation method of high Reynolds number flow around a cylinder, T. Guo, Y.T. Chew, S.C. Luo and M.D. Su 357–366

Finite element and matrix methods
A tutorial in elementary finite element error analysis: A systematic presentation of a priori and a posteriori error estimates, J.R. Stewart and T.J.R. Hughes 1– 22
3D Unstructured mesh ALE hydrodynamics with the upwind discontinuous finite element method, D.S. Kershaw, M.K. Prasad, M.J. Shaw and J.L. Milovich 81–116
Prolate and oblate spheroidal acoustic infinite elements, D.S. Burnett and R.L. Holford 117–141
Finite element modeling of blood flow in arteries, C.A. Taylor, T.J.R. Hughes and C.K. Zarins 155–196
The accuracy of B-spline finite element approximations to PDE surfaces, J.M. Brown, M.I.G. Bloor, M.S. Bloor and M.J. Wilson 221–234
Two-dimensional cascadic finite element computations of combustion problems, J. Fröhlich and J. Lang 255–267
Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems, F. Armero and E. Petőcz 269–300
A new approach to quadrature for finite elements incorporating hourglass control as a special case, P. Hansbo 301–309
Predicting and avoiding shear locking in beam vibration problems using the B-spline field approximation method, A.H. Vermeulen and G.R. Heppler 311–327
Error analysis on bi-parameter finite elements, A. Zhou, C.-b. Liem, T.-m. Shih and L. Lü 329–339
A hierarchical duality approach to bounds for the outputs of partial differential equations, M. Paraschivoiu and A.T. Patera 389–407

Fluid mechanics
3D Unstructured mesh ALE hydrodynamics with the upwind discontinuous finite element method, D.S. Kershaw, M.K. Prasad, M.J. Shaw and J.L. Milovich 81–116
Numerical simulation of the flow field around a cascade of NACA 0012 airfoils-effects of solidity and stagger, B.S. Yilbas, M.O. Budair and M.N. Ahmed 143–154
Finite element modeling of blood flow in arteries, C.A. Taylor, T.J.R. Hughes and C.K. Zarins 155–196
Two-dimensional cascadic finite element computations of combustion problems, J. Fröhlich and J. Lang 255–267
A new numerical simulation method of high Reynolds number flow around a cylinder, T. Guo, Y.T. Chew, S.C. Luo and M.D. Su 357–366

General Rayleigh–Ritz and Galerkin techniques
A tutorial in elementary finite element error analysis: A systematic presentation of a priori and a posteriori error estimates, J.R. Stewart and T.J.R. Hughes 1– 22

Graphics
The accuracy of B-spline finite element approximations to PDE surfaces, J.M. Brown, M.I.G. Bloor, M.S. Bloor and M.J. Wilson 221–234

Incompressible and near incompressible media
Finite element modeling of blood flow in arteries, C.A. Taylor, T.J.R. Hughes and C.K. Zarins 155–196

Kinematics
Computerized determination of singularities and envelopes to families of contact lines on gear tooth surfaces, F.L. Litvin, A.M. Egelja and M. De Donno 23– 34
Computerized generation and simulation of meshing and contact of spiral bevel gears with improved geometry, F.L. Litvin, A.G. Wang and R.F. Handschuh 35– 64

Nonlinear dynamics of systems
Periodic motions for loaded two control edges hydraulic copying systems, A. Halanay and C.A. Safta 367–374

Nonlinear mechanics
A study on the instability problem for 3D frames, J.L. Meek and Q. Xue 235–254
Two-dimensional cascadic finite element computations of combustion problems, J. Fröhlich and J. Lang 255–267
Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems, F. Armero and E. Petőcz 269–300

Numerical solution procedures
A tutorial in elementary finite element error analysis: A systematic presentation of a priori and a posteriori error estimates, J.R. Stewart and T.J.R. Hughes 1– 22
The accuracy of B-spline finite element approximations to PDE surfaces, J.M. Brown, M.I.G. Bloor, M.S. Bloor and M.J. Wilson 221–234
Two-dimensional cascadic finite element computations of combustion problems, J. Fröhlich and J. Lang 255–267
Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems, F. Armero and E. Petőcz 269–300
A new approach to quadrature for finite elements incorporating hourglass control as a special case, P. Hansbo 301–309
Predicting and avoiding shear locking in beam vibration problems using the B-spline field approximation method, A.H. Vermeulen and G.R. Heppler 311–327
Error analysis on bi-parameter finite elements, A. Zhou, C.-b. Liem, T.-m. Shih and L. Lü 329–339
A time integration algorithm for flexible mechanism dynamics: The DAE α-method, J. Yen, L. Petzold and S. Raha 341–355
A new numerical simulation method of high Reynolds number flow around a cylinder, T. Guo, Y.T. Chew, S.C. Luo and M.D. Su 357–366
A hierarchical duality approach to bounds for the outputs of partial differential equations, M. Paraschivoiu and A.T. Patera 389–407

Porous media
Probabilistic characterization of transport in heterogeneous media, R. Ghanem 199–220

Problems in physics
A boundary integral formulation and 2D fundamental solutions for piezoelectric media, D. Haojiang, W. Guoqing and C. Weiqiu 65– 80

Solution of differential equations
Error analysis on bi-parameter finite elements, A. Zhou, C.-b. Liem, T.-m. Shih and L. Lü 329–339
Periodic motions for loaded two control edges hydraulic copying systems, A. Halanay and C.A. Safta 367–374

Solutions of ordinary and partial differential equations
The accuracy of B-spline finite element approximations to PDE surfaces, J.M. Brown, M.I.G. Bloor, M.S. Bloor and M.J. Wilson 221–234
A new approach to quadrature for finite elements incorporating hourglass control as a special case, P. Hansbo 301–309
Error analysis on bi-parameter finite elements, A. Zhou, C.-b. Liem, T.-m. Shih and L. Lü 329–339

A hierarchical duality approach to bounds for the outputs of partial differential equations, M. Paraschivoiu and A.T. Patera 389–407

Spectral methods
A hierarchical duality approach to bounds for the outputs of partial differential equations, M. Paraschivoiu and A.T. Patera 389–407

Spline approximation
The accuracy of B-spline finite element approximations to PDE surfaces, J.M. Brown, M.I.G. Bloor, M.S. Bloor and M.J. Wilson 221–234

Stability in structural mechanics
A study on the instability problem for 3D frames, J.L. Meek and Q. Xue 235–254

Stochastic processes
Probabilistic characterization of transport in heterogeneous media, R. Ghanem 199–220

Structural mechanics
Formulation and analysis of conserving algorithms for frictionless dynamic contact/impact problems, F. Armero and E. Petőcz 269–300
Predicting and avoiding shear locking in beam vibration problems using the B-spline field approximation method, A.H. Vermeulen and G.R. Heppler 311–327
Genuinely clamped beams, L.J. Alvarez-Vázquez, A.R. Rodríguez-Rodríguez and J.M. Viaño 375–388

Transport phenomena
Probabilistic characterization of transport in heterogeneous media, R. Ghanem 199–220

Viscous flow
Numerical simulation of the flow field around a cascade of NACA 0012 airfoils-effects of solidity and stagger, B.S. Yilbas, M.O. Budair and M.N. Ahmed 143–154
Finite element modeling of blood flow in arteries, C.A. Taylor, T.J.R. Hughes and C.K. Zarins 155–196
A new numerical simulation method of high Reynolds number flow around a cylinder, T. Guo, Y.T. Chew, S.C. Luo and M.D. Su 357–366